

WHAT IS CLAIMED IS:

1. An image capturing apparatus comprising:
a solid image pickup element including a photosensitive element and a transistor for logarithmic transformation, in which an output signal from the photosensitive element is input into a first electrode, for outputting a signal, which is logarithmically varied with respect to an incident light intensity to the photosensitive element; and

a voltage controller for controlling a voltage to be applied to a second electrode of the transistor,

wherein the voltage controller applies a first reset voltage to the second electrode, so as to reset the transistor in such a manner that the image capturing apparatus is operated in a state of moving object extraction image pickup, and

wherein the first reset voltage is a voltage for resetting the transistor in one reset level selected from a plurality of reset levels of the transistor.

2. An image capturing apparatus according to claim 1, wherein said voltage controller varies at least one of the voltage value and applying time of the first reset voltage, so as to vary the reset level.

3. An image capturing apparatus according to claim 1, further comprises a detector for detecting the luminance of the object, wherein said voltage controller varies the reset level according to the object luminance detected by the detector.

4. An image capturing apparatus according to claim 3, wherein said voltage controller decreases the reset level as the object luminance detected by the detector is greater.

5. An image capturing apparatus according to claim 4, wherein said voltage controller decreases the reset level by decreasing a change quantity of the voltage value with respect to the first reset voltage.

6. An image capturing apparatus according to claim 4, wherein said voltage controller decreases the reset level by shortening an applying time of the first reset voltage.

7. An image capturing apparatus according to claim 3, further comprises a calculator for determining a luminance range in which an image can be picked up in the moving object extraction image pickup state achieved at

the reset level set at the preceding time,

wherein said voltage controller compares the luminance range calculated by said calculator with the object luminance detected by said detector, so as to vary the reset level based on the comparison result.

8. An image capturing apparatus according to claim 1, wherein said voltage controller further applies a second reset voltage to the second electrode, so as to reset the transistor to a normal image pickup state.

9. An image capturing apparatus according to claim 8, further comprises a timer for counting a predetermined time after the start of the moving object extraction image pickup state,

wherein said voltage controller applies the second reset voltage to the second electrode in order to return to the normal image pickup state when the timer counts up the predetermined time.

10. An image capturing apparatus according to claim 1, further comprises an operating member for manually varying the reset level.

11. An image capturing apparatus according to

claim 1, wherein said plurality of reset levels include two reset levels which are different double or more in upper limit of the object luminance, at which the moving object extraction image pickup is achieved.

12. An image capturing apparatus comprising:
a solid image pickup element including a photosensitive element and a transistor, in which an output signal from the photosensitive element is input into a first electrode, for outputting a signal; and
a voltage controller for controlling a voltage to be applied to a second electrode of the transistor,
wherein the voltage controller applies a first reset voltage to the second electrode, so as to reset the transistor in such a manner that the image capturing apparatus is operated in a state of moving object extraction image pickup, and
wherein a voltage change quantity in applying the first reset voltage is smaller than a half of a voltage change quantity required for resetting the transistor in such a manner that the image capturing apparatus is operated in a normal image pickup state.

13. An image capturing apparatus according to claim 12, wherein said voltage controller further applies a

second reset voltage to the second electrode, so as to reset the transistor to a normal image pickup state.

14. An image capturing apparatus according to claim 12, wherein solid image pickup element outputs the signal which is logarithmically varied with respect to an incident light intensity to the photosensitive element when the image capturing apparatus is operated in the normal image pickup state.

15. An image capturing apparatus comprising:
a solid image pickup element including a photosensitive element and a transistor, in which an output signal from the photosensitive element is input into a first electrode, for outputting a signal; and
a voltage controller for controlling a voltage to be applied to a second electrode of the transistor,
wherein the voltage controller applies a first reset voltage to the second electrode, so as to reset the transistor in such a manner that the image capturing apparatus is operated in a state of moving object extraction image pickup, and

wherein a period of time, during which the first reset voltage is applied, is shorter than a reset time required for resetting the transistor in such a manner

that the image capturing apparatus is operated in a normal image pickup state.

16. An image capturing apparatus according to claim 15, wherein said voltage controller further applies a second reset voltage to the second electrode, so as to reset the transistor to a normal image pickup state.

17. An image capturing apparatus according to claim 15, wherein solid image pickup element outputs the signal which is logarithmically varied with respect to an incident light intensity to the photosensitive element when the image capturing apparatus is operated in the normal image pickup state.

18. An adjusting method for an image capturing apparatus provided with a solid image pickup element having pixels, including a photosensitive element and a transistor for receiving an output signal from the photosensitive element and outputting a signal, comprises the steps of:

calculating a reset condition of the transistor in order to achieve a moving object extraction image pickup at a luminance higher than an upper limit value within an assumed object luminance range; and

resetting the transistor in the calculated reset condition.

19. An adjusting method according to claim 18, wherein said reset condition is reset voltage applied to said transistor.

20. An adjusting method according to claim 18, wherein said reset condition is an applying time of the reset voltage applied to said transistor.

21. An adjusting method according to claim 18, wherein solid image pickup element outputs the signal which is logarithmically varied with respect to an incident light intensity to the photosensitive element.